

Title (en)

METHOD FOR THE ELECTRODEPOSITION OF A TIN-CONTAINING LAYER

Title (de)

VERFAHREN ZUR ELEKTROLYTISCHEN ABSCHIEDUNG EINER ZINNHALTIGEN SCHICHT

Title (fr)

MÉTHODE POUR L'ÉLECTRODÉPOSITION D'UNE COUCHE CONTENANT DE L'ÉTAIN

Publication

EP 2868778 B1 20230531 (EN)

Application

EP 14191883 A 20141105

Priority

US 201314071679 A 20131105

Abstract (en)

[origin: EP2868778A2] Tin electroplating baths having certain brightening agents and nonionic surfactants provide tin-containing solder deposits having good morphology, reduced void formation and improved within-die uniformity.

IPC 8 full level

H01L 23/00 (2006.01); **C25D 3/32** (2006.01); **C25D 3/60** (2006.01); **C25D 7/12** (2006.01); **H05K 3/34** (2006.01)

CPC (source: EP US)

C25D 3/32 (2013.01 - EP US); **C25D 3/60** (2013.01 - EP US); **C25D 7/123** (2013.01 - EP US); **H01L 24/11** (2013.01 - EP US); **H01L 24/05** (2013.01 - EP US); **H01L 24/13** (2013.01 - EP US); **H01L 24/94** (2013.01 - EP US); **H01L 2224/0345** (2013.01 - EP); **H01L 2224/03452** (2013.01 - EP); **H01L 2224/05155** (2013.01 - EP); **H01L 2224/05171** (2013.01 - EP); **H01L 2224/05611** (2013.01 - EP US); **H01L 2224/05647** (2013.01 - EP); **H01L 2224/05655** (2013.01 - EP US); **H01L 2224/11462** (2013.01 - EP US); **H01L 2224/1147** (2013.01 - EP); **H01L 2224/11849** (2013.01 - EP); **H01L 2224/13082** (2013.01 - EP US); **H01L 2224/13083** (2013.01 - EP US); **H01L 2224/131** (2013.01 - EP US); **H01L 2224/13111** (2013.01 - EP US); **H01L 2224/13147** (2013.01 - EP US); **H01L 2224/13155** (2013.01 - EP US); **H01L 2224/94** (2013.01 - EP US); **H05K 3/3473** (2013.01 - EP US)

Citation (examination)

- JP S61117297 A 19860604 - EBARA UDYLITE KK
- US 2011189848 A1 20110804 - EWERT INGO [DE], et al
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EP3272912A1; CN110176441A; EP3702493A4; EP3002350A1; KR20160038805A; US11162182B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 14191883 A 20141105; CN 201410858387 A 20141105; JP 2014224806 A 20141105; KR 20140153178 A 20141105; TW 103138321 A 20141105; US 201314071679 A 20131105